The Phoenix Mars Mission's Education and Public Outreach Program Focus on Astrobiology Themes

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The Phoenix Mars Mission, scheduled for launch in 2007, is the first in NASA's "Scout Program." Phoenix is specifically designed to measure volatile (especially water) and complex organic molecules in the arctic plains of Mars. The Phoenix Education and Public Outreach (E/PO) program is designed to augment the overall mission, where the goals of the E/PO program directly flow from the mission objectives. Specifically, the mission objectives to (1) study the history of water in the martian arctic and (2) search for habitable zones in the martian permafrost are linked to two E/PO goals with a fundamental focus on astrobiology. The first E/PO goal, labeled "Water and Life," addresses a current void present in science education by promoting the exploration and understanding of the physical, chemical, and thermodynamic properties of water that make it an essential ingredient for life. The second goal, labeled "Soil Habitability," promotes and enables students and the public to use authentic scientific data and images to analyze the chemical properties of Mars' soil to infer potential habitability. These goals are supported by a robust program based on partnerships with existing exemplary education and outreach programs that have appreciable success in increasing understanding of astrobiology-related concepts.